Status of Salmon and Steelhead Runs into the Snake River

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I will discuss the recent trends of abundance of wild and hatchery runs of salmon and steelhead into the Snake River, the status of the fisheries, and the status of the anadromous fish habitat in the Snake River system. The fish runs to receive special mention are the spring Chinook, summer Chinook, and summer steelhead. I will dispense with fall Chinook and sockeye now by mentioning only that these formerly very abundant runs have been decimated to the point where there are only about 2,000 fall Chinook and a few hundred sockeye that still enter the Snake River each year.

Summer Steelhead

The summer steelhead strain is the largest of the Snake River anadromous fish Runs, and statistics on the run are available since Ice Harbor Dam was built in 1962. There was a large run of over 100,000 steelhead in 1962. During the period 1963-1972, the runs into the Snake River showed a good degree of stability and ranged from about 50,000 to 85,000 fish yearly, and averaged more than 60,000. The run plummeted drastically to 37,000 in 1973, and then dwindled to a record low of 12,000 in the following year. These small runs are directly caused by the impact of the dams which have altered the ecological balance of the river. When final counts become available for the 1975 run, we will see that it was again extremely small, probably in the magnitude of 16,000 steelhead.

Hatchery production of Snake River steelhead has been concentrated in the mitigation programs at Niagara Springs Hatchery and Dworshak National Fish Hatchery. Significant inputs of hatchery-reared steelhead were started in the late 1960s, and have contributed up to 40% of the steelhead run in subsequent years. While hatchery production has been playing an extremely important role in recent years, the wild stocks have been depleted to approximately 10% of the 1962 population.

The health of the steelhead fishery in the Snake River drainage has obviously echoed the declining abundance of stocks. The three states of Oregon, Washington, and Idaho closed the Snake River drainage for steelhead sport fishing in 1974, and there has been no sport fishing for steelhead since that October, except for some minor catch-and-release fishing in Idaho last fall.

Spring Chinook

Spring Chinook are the most abundant of the Snake River salmon. The trend of The spring run into the Snake River was one of increasing abundance through the Early 1960s. The run decreased sharply in 1974 and 1975 to about 20,000 fish per Year.

Hatchery production of spring Chinook has been important since the late 1960s, when operations started at Rapid River Hatchery. The impact on the salmon run has paralleled our steelhead experience; hatchery production has contributed as much as 40% of our spring Chinook at a conservative estimate. During the early 1960s, some fisheries people had reservations concerning the feasibility of successful hatchery operations for anadromous fish in the Snake River tributaries.

However, the success of the larger operations and their tremendous importance To the health of the runs is self-evident.

Salmon fishing in the Snake River drainage has unmistakably suffered, according to the run size. There was no fishing for salmon in the Snake River drainage in 1975 and the outlook for 1976 remains poor.

Summer Chinook

The outlook for the future of the summer Chinook run into the Snake River has been the most bleak. Each of the last three years has established a record low. There has been no intentional sport or commercial fishery, except harvesting by Indian treaty-right fishing, on summer Chinook since 1965. Problems at the dams are the apparent cause of the continuing low level of summer Chinook populations.

There has still been no significant hatchery production of summer Chinook. We are presently rearing summer Chinook in a new program at McCall and Mackay hatcheries in Idaho. This began with the 1974 brood year, and will produce the first release of 300,000 smolts this spring. This hatchery program is planned as a prelude to the pending lower Snake River Compensation Plan which we hope to see authorized by Congress in 1976.

Habitat

Obviously, much of the former habitat of the Snake River drainage no longer exists, and it probably will not be available to anadromous fish populations in the future. Such loss of habitat is particularly severe in the drainage above Brownlee Dam and Dworshak Dam. Some of the runs that formerly ascended into these Areas are being maintained by hatchery programs such as at Rapid River Hatchery and Dworshak National Fish Hatchery. Workable plans are underway to replace some of the runs that have been displaced, and that are not presently being maintained with hatchery smolts. Aside from these areas, the habitat of the other Snake River tributaries of Oregon, Washington, and Idaho is not much changed from that of the 1950s. Idaho still has more than 3,000 stream miles of good salmon and steelhead habitat remaining, and this habitat receives some of our most stringent forms of protection. Protecting the habitat of anadromous fisheries is a primary purpose of managing about 5,700 square miles of Idaho as wilderness and primitive areas where logging, mining, roads, and other land uses are not permitted. Such self-denial represents a tremendous investment in maintaining these runs of fish.

There are not active plans to build another impoundment on the salmon and steelhead waters in the Snake River system. It appears that we should be able to hold the status quo quite well and preserve our surviving habitat in the Snake River drainage. A more serious deficiency is that the available habitat is being Drastically understocked by poor spawning escapements.

The programs of most significance to the status of our anadromous fish runs, programs, which will ultimately decide the fate of the Snake River salmon and steelhead, are those geared to improve the survival of upstream and downstream migrants at the dams.

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